

ABSTRACT OF THE DISLCOSURE

A sensor head apparatus is configured to include a plurality of sensor ports each configured to receive and electrically interconnect with a sensor head component. The sensor head is further configured to be connectable to a housing for a multi-parameter monitoring tool assembly, wherein electrical connections are provided between the electronics for the tool assembly and any sensor head component engaged in the sensor head. Each port in the sensor head is configured to receive and engage a sensor head component through application of a linear force on the component.